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| APPLICATION NO. FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
| 09/871,485 | 05/31/2001 | Hovhannes Ghukasyan | HPLA.005US0 | 8744 | |
| 28661 | 7590 06/18/2003 | | | · | |
| SIERRA PATENT GROUP, LTD. P O BOX 6149 | | | EXAMINER | | |
| STATELIN | - | NGUYEN, TAM V | | | |
| | | | ART UNIT | PAPER NUMBER | |
| | | | 2172 DATE MAILED: 06/18/2003 | 10 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | Application No. | | Applicant(s) | |
| , | Office Author O | 09/871,485 | | GHUKASYAN ET AL. | |
| | Office Action Summary | Examiner | | Art Unit | |
| | | Tam V Nguyen | | 2172 | |
| Period fo | The MAILING DATE of this communication app or Reply | pears on the cover sh | eet with the co | orrespondence address - | - |
| THE I - Externanter - If the - If NC - Failu - Any r | ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a repl period for reply is specified above, the maximum statutory period or re to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, y within the statutory minimul will apply and will expire SIX accuse the application to be | may a reply be time m of thirty (30) days (6) MONTHS from to come ABANDONED | ely filed will be considered timely. he mailing date of this communica) (35 U.S.C. § 133). | ation. |
| 1)⊠ | Responsive to communication(s) filed on 31 I | <u> May 2001</u> . | | | |
| 2a) <u></u> | This action is FINAL . 2b)⊠ Th | is action is non-final | | | |
| 3) Dispositi | Since this application is in condition for allows closed in accordance with the practice under on of Claims | | | | ts is |
| 4)🖂 | Claim(s) 1-10 is/are pending in the application | 1. | | | |
| | 4a) Of the above claim(s) is/are withdra | wn from consideratio | on. | | |
| 5) | Claim(s) is/are allowed. | | | | |
| 6)⊠ | Claim(s) <u>1-10</u> is/are rejected. | | | | |
| 7) <u> </u> | Claim(s) is/are objected to. | | | | |
| 8)□ | Claim(s) are subject to restriction and/o | r election requireme | nt. | | |
| Applicati | on Papers | · | | | |
| 9)[| The specification is objected to by the Examine | r. | | | |
| 10) | Γhe drawing(s) filed on is/are: a)□ acceμ | oted or b) objected t | o by the Exam | niner. | |
| | Applicant may not request that any objection to the | | | | |
| 11) 🗌 🗀 | The proposed drawing correction filed on | | - | ed by the Examiner. | |
| | If approved, corrected drawings are required in re | - | | | |
| | The oath or declaration is objected to by the Ex | aminer. | | | |
| _ | nder 35 U.S.C. §§ 119 and 120 | | | | |
| 13) | Acknowledgment is made of a claim for foreign | n priority under 35 U. | S.C. § 119(a) | -(d) or (f). | |
| a)[| All b) Some * c) None of: | | | | |
| | 1. Certified copies of the priority document | s have been receive | d. | | |
| | 2. Certified copies of the priority document | s have been receive | d in Applicatio | n No | |
| | Copies of the certified copies of the prior application from the International Bu ee the attached detailed Office action for a list | reau (PCT Rule 17.2 | ?(a)). | _ | |
| | cknowledgment is made of a claim for domesti | | | | ation). |
| a) | The translation of the foreign language procedures to the control of the con | visional application I | has been rece | ived. | ,- |
| Attachment | | - | | | |
| 2) Notice | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u> | 5) 🔲 Not | tice of Informal Pa | (PTO-413) Paper No(s) atent Application (PTO-152) | ~ · |
| .S. Patent and Tro PTO-326 (Rev | | tion Summary | | Part of Paper No. 10 | |

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DETAILED ACTION

1. Claims 1-10 are pending in this action. Claims 1-10 are presented for examination. This action is in response to the filing dated 5/31/01.

Information Disclosure Statement

2. The reference cited in the IDS, PO-1449, Paper No. 7, have been considered.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suver (US 6016497).

With respect to claims 1 and 9, Suver discloses a data dictionary including identifications of related groups of tables in a database, information of tables in said related groups, and identifications of parameters of said related groups, (col. 8, lines 46-59 and col. 9, lines 41-46); a data importer receiving an input including data to be imported into said database, and indication of one or said related groups that is associated with said data, and indications of parameter associated with said data, (col. 8, lines 46-59 and col. 9, lines 41-46), wherein said data importer appends one or more portions of said data associated with existing parameters to corresponding one or more existing tables associated with said existing

parameters and having tables of said one of said related groups as reference. appends data associated with new parameters to a new table created for said new parameters, and updates said data dictionary to include said identifications and information of said new table and new parameters, (col. lines 20-col. 21, lines 30). Suver does not explicitly discloses a data importer. However, as taught by Suver, the principal downside for this conventional database architecture is that it forces the database designer to physically decompose complex business objects into multiple tables. This is manifested via the multiple tables 302, 303 for customer addresses and customer telephone numbers, which permit multiple rows to reflect that a customer may have multiple addresses or telephone numbers. Although the architecture is very fast for accessing simple data that can be stored in a single table, multiple tables complicate schema design and considerably slow access to complex objects. A database engine must join multiple rows from multiple tables simply to recompose a business object that was originally just one data "item" in the real world, e.g. a customer with more than one telephone number, (col. 8, lines 46-59). Thus, the database designer to physically decompose complex business objects into multiple table is a data importer. Therefore it would have been obvious have been obvious to one of ordinary skill in the art at the time the invention was made to modify Suver by including a data importer. By doing so, the information in object relational database would allow the user to manipulate as a virtual table, (col. 1, lines 9-11).

As to claim 2, a query front-end providing a parameter tree to be displayed to users for facilitating database queries, wherein said data dictionary further includes information for said parameter tree, and said data importer further updates said information for said parameter tree to include information of said new table and new parameter, (col. 21, lines 30-46).

As to claim 3, wherein said data dictionary has a reference groups table for storing indications of related groups of tables for storing indications of related groups of tables, and including columns for reference groups identifications and reference groups names, (col. 21, lines 30-46).

As to claim 4, wherein said data dictionary has a reference table for storing information of reference tables for individual of said related group of tables, (col. 8, lines 46-59).

As to claim 5, wherein said data dictionary has a parameters table for storing information of parameters associated with individual of said related group of tables, (col. 8, lines 46-59).

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As to claim 6, wherein said data dictionary has a folders table for storing information of a parameter tree to be provided to said query front-end, (col. 12, lines 37-49).

As to claim 7, wherein said data dictionary has a parameters associated with individual of said related group of tables, (col. 8, lines 46-59).

As to claim 8, wherein said data dictionary has a parameters to folders mapping table for mapping said information of parameters to corresponding information in said folder table, (col. 12, lines 37-49).

As to claim 10, identifying said one or more existing tables having said related group of tables as references in said database from information in said data dictionary linking said one or more existing table to said existing parameter, (col. 14, lines 14-23).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Mehr et al. (US 6438547B1) shows computer-readable data product for managing sales information

Loaiza (US 5809495) shows method for obtaining information regarding the current activity of a database management system from a virtual table in a memory of the database management.

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Herbert, III (US 6018742) shows constructing a bifurcated database of context-dependent and context-independent data items.

Mital et al. (US 6189012B1) shows apparatus and method for storing, navigating among and adding links between data item.

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Contact Information

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam V Nguyen whose telephone number is (703) 305-3735. The examiner can normally be reached on 7:30AM-5: 00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Yen Vu can be reached on (703) 305-4393. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for formal communications and (703) 746-7240 for informal communications. Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal

Drive, Arlington, Virginia 22202. Fourth Floor (Receptionist).

8. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

TV:tv

06/11/03

SHAHID AL ALAM PATENT EXAMINER